

**ABSTRACT OF THE DISCLOSURE**

In a method of forming a contact in a semiconductor device, an insulating layer is formed on the semiconductor substrate. Then, a contact hole is formed by selectively etching the insulating layer. A barrier metal layer is deposited on side and bottom surfaces of the contact hole and on a top surface of the insulating layer to a uniform thickness. A wetting layer of an oxidation-resistive metal material is deposited on the barrier metal layer. A metal layer is formed on the wetting layer and fills the contact hole to thereby form a contact in the semiconductor device.

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